Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

IT PROJECT EVALUATION

SECTION I: PROPOSAL

Date: 6/18/01

Agency Name: Iowa Department of Educationi

Project Name: Project EASIER Expansion

Expenditure Name:

Agency Manager: Leland R. Tack

Agency Manager Phone Number / E-mail: (515) 281-4835 / lee.tack@ed.state.ia.us

Executive Sponsor (Agency Director or Designee): Ted Stilwill

Request For ROI Application Waiver:
Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation: N/A

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute? ☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: The National Center for Education Statistics (NCES), U. S. Department of Education, has encouraged states to move toward collecting Federal Common Core Data directly from electronic student information systems. For the last two years, NCES has sponsored a major federal initiative to develop software and strategies to exchange student records involving multiple states at a regional level. They have also supported the development of EDI transaction sets for students, staff and institutions. The NCES has a clear Congressional mandate to support the development of systems that will provide uniform, accurate, and timely data.

Is this project or expenditure required by State statute? ☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: In accordance with Chapter 256.9(18) of the Iowa Code, the Department has established that electronic transmission of student records will become the standard for data required for state and federal reporting needs.

Does this project or expenditure meet a health, safety or security requirement?
☐ **YES** (If "YES," explain) ☒ **NO**

Explanation: N/A

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: The project contributes to meeting the state strategic goals as noted in the 2010 Plan:
Goal 2: Iowans are electronically connected to each other and to the world. Access to advanced telecommunications services statewide and a continuing ability to take advantage of emerging technologies have moved Iowa to the forefront in education, e-commerce, e-government, teleworking, telemedicine, community development and other new fields, and revitalized rural economies.

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: The project is included in the State Board of Education Strategic Plan under the information strategy that states: The State Board and the Department will effectively communicate the needs of the education system and the Department will develop the information systems needed for quality planning, policy development, decision making and accountability.

Is this a "research and development" project or expenditure? ☐ **YES** (If "YES," explain)
☒ **NO**

Explanation: N/A

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) and a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response: Before Project EASIER and computerized student information systems, districts were required to examine each student record manually and keep a manual+ tally of the necessary data. This process was aided by the use of spreadsheet and database computer programs, however, the functionality was limited. Even such a vital task as creating a count of students by school, grade race and gender required individual student records to be aggregated by hand often being handled and counted numerous times to ensure accuracy. Project EASIER offers the opportunity to capitalize on the efforts already made by school districts in keeping track of student information electronically. Electronic Data Interchange sets the standard for Project EASIER. Utilizing standardized formats for data contained in local school district automated student information systems and transmitting individual records electronically means that aggregation of data for required state and federal reports is completed at the state level, rather than at the local level. It also means that the information included in high school transcripts sent electronically to post-secondary institutions can be received and evaluated by the institutions in a timely and consistent manner, and that individual student records can be transmitted instantaneously when students move from one school district to another. On the post-secondary side, the transmission, receipt and acceptance of student transcripts transmitted in this manner is greatly enhanced since testing of transmissions has been achieved in the preliminary stages and trading partner agreements have been established between sending school districts and receiving post-secondary institutions. This proposed expansion of Project EASIER will allow all districts to enter the project and begin transmitting student data electronically, ensure that all Community Colleges and Regents Institutions have the knowledge, equipment and training to begin accepting transcripts electronically from district.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response: Project EASIER improves customer service to school districts by reducing the data burden imposed by mandatory state reporting. School districts also benefit by being able to send transcripts to postsecondary institutions with a much shorter processing time and being able to send student records more efficiently for students transferring out of district. More transcripts and student records can be sent in less time with fewer people. The ROI portion of this application quantifies these savings to districts. Postsecondary institutions in Iowa benefit by receiving student transcripts in a timely manner and by having these transcripts standardized based upon an EDI framework. This allows admissions officers to evaluate transcripts more quickly and reduce turnaround time. Again, more transcripts can be evaluated in less time with fewer people. The students of Iowa benefit by having significant amounts of their educational leaders time freed up so that there is more time to meet student needs and provide quality educational experiences for children. Graduates are also provided a faster, more secure, and more efficient process for transmitting transcript infomration to colleges and Universities and receive districts receive electronic acknowledgments of transcripts received. Project EASIER also allows students transferring from one school district to another to be placed properly and quickly upon arrival at a new school. This proposed expansion will ensure that all students and school district personnel have the opportunity to benefit from the advantages of Project EASIER.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response: See 2 above and Section IV, Part C, Number 5

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. Project Executive Sponsor Responsibilities: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Response: No response required.

2. Organization Skills:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency

d. Summarize relevant agency project management experience and results

Response:
Management Skills necessary for successful project implementation includes the following:

2. a. List the project management skills necessary for successful project implementation

- Ability to work with staff, vendors, and local school districts
- Collaboration with post-secondary institutions
- Communication skills
- Customer service
- Recruitment and involved strategies
- Knowledge and understanding of state technology standards

2. b. List the project management skills available within the agency

- Policy management
- Planning

2. c. List the source(s) of project management skills lacking within the agency

Department of Education staff possesses much of the knowledge and understanding of the above but require assistance from a third party technical provider to resolve highly technical issues, to handle the customer service volume, and to plan for future improvements in the process.

2. d. Summarize relevant agency project management experience and results

Project EASIER has demonstrated continued success with 225 public school districts currently participating and 180 of these districts successfully transmitting individual student records to fulfill state and federal reporting requirements, and one district transmitting electronic transcripts in a production mode to the University of Northern Iowa and to Iowa State University.

The transition from paper-based data collection to web-based data collection for all school districts and non-public schools was made over a two-year period resulting in improved quality and timeliness of data and a cost savings for the agency.

The following Department staff from the Division of Financial and Information Services are directly involved with the management and operation of Project EASIER.

Leland R. Tack, Division Administrator
David J. Alvord, Chief- Bureau of Planning, Research and Evaluation
Coleen McClanahan- Project Coordinator
Roger Peterson- Project Technical Analyst
Alison Radl- Technical Consultant
Joe DeHart- Web Data Collection Coordinator
David Krieger- Department IT Manager

B. Project Information

1. History:
   a. Is this project the first part of a future, larger project? If so, please explain.
   b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

Response: Project EASIER was established in 1995. As technology changed, the project changed accordingly. Pooled technology funds were applied for and received to transitiion Project EASIER from a client-side, application based process to a server-side, web-based process.

Currently 225 Iowa school districts have committed to Project EASIER and are involved at various stages of development. In 1999-2000 approximately 130 school districts or 34.8% of all Iowa school districts submitted information to the Department for required state reports directly from their own electronic student information databases, thus eliminating the need to complete the forms on the Department's web site. In 2000-01 about 185 or 49.6% of all Iowa school districts transmitted student records to fulfill state and federal reporting requirements. The non-sending districts in the project are in a development phase and are receiving training, populating necessary data and sending test transmissions. The information received from the EDI transmissions is processed by the Department and migrated to the Department's web site for verification by the sending district. In addition, about three-dozen participating districts have used EDI to send test transcripts to the University of Iowa, Iowa State University, University of Northern Iowa, and Kirkwood Community College. Each newly EDI enabled site transmits test transcripts to participating post-secondary institutions as a part of the testing phase. All five high schools in the Des Moines School District have transmitted electronic transcripts via EDI in a production mode to the University of Northern Iowa and Iowa State University. Additional trading partner agreements are being developed to expand both the number of districts sending transcripts and the number of postsecondary institutions receiving electronic transcripts. Work is currently underway to develop the district-to-district EDI exchange of student records among school districts participating in Project EASIER. Explorations into the use of XML are continuously being explored in project planning and in pilot study phases.

The Department of Education is currently involed in the transition from client-side to server-side technologies. A vendor was selected to help the Department design a system capable of handling the data transfer and transformation necessary in Project EASIER, and to actually build the designed system. The contracted vendor and the Department of Educatrion are currently utilizing the Rational Unified Process (RUP) to facilitate system design. Implementation of the new system is scheduled for spring 2002.

2. Expectations: Describe the primary purpose or reason for the project.

Response:

The vision of Project EASIER is:
To provide Iowa's educational community with ready access to information resources in order to enhance services to all students.

The mission of Project EASIER is:
To reduce data burden and encourage better decision making by establishing and maintaining a cost-effective method of accessing and transferring accurate and timely education information among school districts, area education agencies, post-secondary institutions and the Iowa Department of Education.

The purpose of the project is to expand the current project scope to:
1) include all public school districts by the 2003-04 school year;

2) expand the number of required annual state and federal reports that can be completed through Project EASIER;

3) expand the project data element base by identifying and including those existing data elements needed for immediate and appropriate placement of students when they move from one Iowa school district to another to begin the district-to-district information exchange phase of Project EASIER;

4) increase the number of school district and postsecondary institution trading partnerships;

5) increase the number of Iowa community colleges capable of receiving electronic transcripts from Iowa secondary schools;

6) increase the Department's capacity for developing processes necessary tohandle and process the flow of student records intended for various trading partners

3. Measures: Describe the criteria that will be used to determine if the project is successful.

Response:
Number of districts in project

Number of districts sending student records electronically

Number of postsecondary institutions receiving electronic transcripts

The number of forms that can be completed through participation in Project EASIER

Percent of students included in project

Feedback monitoring from project participants

Timeliness and accuracy of student information

Willingness of school districts to become involved in planning and research and development activities to continuously improve the project

Growth in the number of districts using the district to district project component and the district to postsecondary component

Note: The district to district and the district to postsecondary component are designed soley for school districts and the Department interests with respect to these two components are to promote effectiveness, efficiency, and security in the sharing of student records and to promote leveraging of technology that currently exists at the school district level.

4. Environment: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

Response: To date, local school districts, area education agencies, community colleges and Regent's institutions have been involved in the planning, testing and implementation of Project EASIER. As Project EASIER evolved from the planning and testing phase to implementation, other states and the Federal Government have recognized Iowa as a leader in electronic student data transfer. Though other states are implementing parts of Project EASIER, Iowa is the only state committed to district-to-district, district-to-Department of Education and district-to-post-secondary institution transfer of student records, and one of a small number of states currently using this technology to collect information from local schools for state and federal reporting needs.

5. Risk: Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response: Risks with respect to expanding Project EASIER are minimal. Department hardware and software used for the project are used for multiple purposes. The system is being built with the flexibility of using EDI or XML standards. The AACRAO (American Association of Collegiate Registrars and Admissions Officers) Server, a server designed to serve postsecondary transcript needs nationwide has been in operation since the early 1990s. Transcripts sent from Iowa school districts make use of the AACRAO server as part of the project procedures. The cost to register sites is free and there is no limitation as to the number of transcripts processed. The risk in terms of Department staff resources is not an issue as there are many skills transferred to school district personnel that can be used in other technology endeavors at the district level. The risk of non-participation or discontinued participation by postsecondary institutions is also low as reflected by their continual support of the project efforts and as reflected by RCER (Regents Committee on Educational Relations - established by Iowa Code) action in adopting as their goal, electronic transcript exchange among all Iowa postsecondary institutions and between Iowa high schools and all Iowa postsecondary institutions.

Extensive planning, research, and testing as well as continuous review of new procedures and processes is a regular practice of the Project EASIER team in the Department as well as reviews by various participating school districts and postsecondary institutions.

6. Security / Data Integrity / Data Accuracy / Information Privacy
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Response: One of the major advantages of the project for local school districts, colleges and universities and the Department is the improvement in the overall quality, timeliness, security, and accuracy of the data being transmitted. Due to transmitting individual student records, data aggregation is possible for any combination of the data elements received.

Security and privacy of the data being transmitted is increased due to the reduction in the number of people required to handle the data from the originating site to the target organization. Privacy is maintained by requiring all data transferred through Project EASIER to be encrypted.

6. a. List the security requirements of the project

All project school districts are provided with PGP encryption to encrypt all transmissions of student records. As district transition to the server based process they will have the security of Secure Socket Layers.

No personally identifiable information is received by the Department for state and federal reporting purposes.

All transcript transmissions are encrypted and must be requested at the district level by the student seeking to have the transcript sent. Electronic transcripts being sent contain the same data elements as those photocopied and mailed by districts currently.

District to district transmissions will also be secured through SSL.

6. b. Describe how the security requirements will be integrated into the project and tested

Security requirements are in place and have been, with the exception of SSL, since project inception in 1995-96.

6. c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Data integrity is ensured through the use of encryption technologies such as PGP and SSL, in which alteration of data files prevents decryption. Use of EDI standards, specifically Transaction Set 130 of the ANSI X12 Standard, ensures structural integrity and uniformity of data.

Data accuracy is monitored through a series of edits, both at the local and state levels, built into the project procedures.

FERPA workshops have been conducted throughout the state and participating districts have been appraised of privacy requirements contained therein. The Department does not receive any personally-identifying information about students from school districts.

Note: School districts did not have the option of uploading records directly to the server until SSL was added. Prior to this time files were encrypted with PGP and transmitted as an email attachment.

7. Project Schedule

Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response: See attachement A

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment

1. Software (Client Side / Server Side / Midrange / Mainframe):
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external

Response:

1. a. Application software

Districts participating in Project EASEIR are required to have a student information management software package capable of creating a file extract. The Department of Education assists all districts participating in Project EASIER independent of software type so long as the software can create file extracts that can be mapped to universal standards (EDI). Examples of student information software packages currently being used in the project are: JMC, Mac School, Win School, SASI-xp, SchoolMaster, PowerSchool, AAL, Pentimation, McGraw-Hill, CIMS, Admin Plus and others. Participating districts using JMC require no other application software because the vendor has incorporated necessary EDI mapping standards into the software package. Participants using other software packages must also have a translation software package to map local data to EDI standards. All participating districts also use encryption software to allow data to be encrypted prior to transmission via the Internet. Each district must also have email software capable of sending/receiving attachments in the current MIME standard.

At the Department of Education, Visual Basic applications have been created to process and store the data onto the Department's SQL server. Active Server Pages (ASP) are then utilized to create a web interface for review and certification of the Project EASIER data.

1. b. Operating system software

At the participating district level, operating systems that have been encountered to date are supported. At the state level, Windows NT 4.0 is currently used. The Department is transitioning to Windows 2000.

1. c. Major interfaces to other systems, both internal and external

Individual student and summary records gathered through the Project are integrated into the BEDS data store and data collection web site.

The Project provides an external interface to a service operated by AACRAO (American Association of Collegiate Registrars and Admissions Officers) that provides a clearinghouse for student records/transcripts sent to participating post-secondary institutions including Iowa State University, University of Iowa, University of Northern Iowa, and Kirkwood Community College or other public school districts.

To allow the project to operate independent of operating system and application software, EDI standards are being employed to transfer data from site to site. EDI is currently the only universal systems structured to allow consistent and reliable data transfer. XML is continuously being studied and as this technology matures it may provide a better process for the transfer of data. For data that is transmitted district-to-state, once it has been received and processed by the Department, it is then available to be aggregated and distributed in any needed format.

2. Hardware (Client Side / Server Side / Mid-range / Mainframe):
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and bandwidth

d. Logical and physical connectivity
e. Major interfaces to other systems, both internal and external

Response:
2. a. Platform, operating system

Currently, project participants need a computer capable of running their student information software package. This ranges in some instances from a Power PC 7100 with 8 MB of ram, to the biggest and best computer on the market. Macintosh, Windows 3.x, Windows 95/98/NT/2000 operating systems are supported within the project.

At the Department, a web server accessing a SQL Server database running on Intel-processor based Compaq servers and Compaq workstations running Windows NT are used to process the data, allow trading partners to review and certify the data.

2. b. Storage and physical environment

Servers are stored in the Department's climate-controlled, secure room.

2. c. Connectivity and bandwidth

Currently, all project participants need a standard Internet connection. This may be accomplished via a 56K dial-up or a LAN/T1 connection. Participants in the project vary significantly in their technical sophistication. The bandwidth and connectivity requirements of the project are kept to a minimum at the client side to encourage participation and hold down district costs.

2. d. Logical and physical connectivity

At the state level, current Department network and Internet connections are utilized to receive, process and manage the project.

2. e. Major interfaces to other systems, both internal and external

No other major hardware interfaces are required, other than those mentioned in 2.d.

B. Proposed Technology Environment

1. Software (Client Side / Server side / Mid-range / Mainframe)
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external
   d. General parameters if specific parameters are unknown or to be determined

Response:
Due to the minimal requirements for participation in Project EASIER and the fact that the project supports all operating systems and platforms, no changes in client side software are required for the advancement of the project. All software components are in place to continue district-to-state, and district-to-postsecondary reporting and to advance to district-to-district sharing of student data.

On the state side, current EDI standards offer the most functional and reliable basis for electronic transfer of data. The biggest potential advancement in state processing of electronic data is XML. However, until all trading partners accept and become equipped to utilize XML's potential, EDI remains our best option. Advancements in XML including School Interoperability Framework (SIF) Schema and BizTalk Server are being researched and monitored by Department staff and it is anticipated that ultimately XML will be incorporated into the project.

Another advancement being implemented in server side technology is moving the mapping and translation component to a web-based application. This eliminates the installation and maintenance of any software at the district level and reduces the minimum computer specifications to any machine with an Internet browser. A centralized application would reduce cost by allowing maintenance and upgrades to occur in one place, reducing district visits for minor changes. This model would also reduce technical support burden on DE staff by providing a web interface for directions and providing a correction mechanism for smoothing data inconsistencies or errors.

2. Hardware (Client Side / Server Side / Mid-range / Mainframe)
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

Response: As client side technology and operating environment for both Project EASIER participants and BE staff do not change from the current environment. As part of this application, the Department would be adding a test server environment to assist in development and expansion of the project. All server equipment, both production and test, will be Intel-based Compaq Servers running Windows 2000 Advanced Server. Microsoft SQL Server will be utilized to stoare and manipulate necessary data. Internet Infomration Serveces (IIS5) will allow web connectivity. Secure Socket Layering (SSL) will be incorporated on all DE servers to improve data security. All servers will have UPS services and data backup hardware. All systems will utilize current State of Iowa internet access and fierewall protections. All equipment will be housed at the DE in a climate controlled environment.

C. Data Elements

If the project creates a new database, provide a description of the data elements.

Response: No new data elements will be added to the Department database. The current set of data elements captured through the project went through extensive screening by all stakeholders. The current set of data elements is a "best fit" for all parties involved.

SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \%\ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times \%\ State\ Share\right)=Annual\ \text{Pr}orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$233,000	4	100%	$0	100%	$58,250
Software	$20,000	4	100%	$5,000	100%	$10,000
Hardware	$30,000	3	100%	$0	100	$10,000
Training	$25,000	4	100%	$8,000	100%	$14,250
Facilities	$0	1	0%	$0	0%	$0
Professional Services	$107,000	4	100%	$0	%	$26,750
ITD Services	$0	4	0%	$0	0%	$0
Supplies, Maint, etc.	$0	1	0%	$0	0%	$0
Other (Specify)	$0	1	0%	$0	0%	$0
Totals	$415,000	-------	-------	$13,000	------	$119,250

Transfer this amount to the ROI Financial Worksheet, item “D” on page 18.

B. Funding: Enter data or provide response as requested

1. This is (pick one):
   - [X] A Pooled Technology Fund or Reengineering Fund Request
   - [ ] An Agency IT Expenditure or Budget Request (General Fund, Road Funds, etc)
   - [ ] Other – Specify:

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$233,000	54.8%	$0	100%	$0	100%
Pooled Tech. Fund	$182,000	45.2%	$0	0%	$0	0%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$415,000	100%	$0	100%	$0	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

Response: FY01 527,000
FY02 400,000

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be absorbed by your agency from normal operating budgets (all funding sources)?

Response: For FY03, $233,000 or 56.1% absorbed by the state, State absorbs 100% of costs each year after

2. Identify, list, and quantify all new annual ongoing (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

Response: None

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1. Annual Pre-Project Cost – Quantify all actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Response: N/A

2. Annual Post-Project Cost – Quantify all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: N/A

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: N/A

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

Response: See number 5 and attachment B

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response: Citizens of the State of Iowa will benefit from the time and cost savings resulting from school districts being able to reduce the time necessary to complete annual state and federal reporting requirements. This allows more school personnel time to be devoted to the direct service of students and families of Iowa. It is estimated that the annual cost savings associated with Project EASIER ranges from $336,453 to $664,010 per year. These same figures were presented in the Department of Education's original pooled technology fund request. The additional benefits associated with the proposed expansion of Project EASIER still fall within this range but may push the actuial savings towards the higher end of the above range. The higher number ($664,010) will be used for further calculations in this application. For further information regarding this estimate, see attachment B.

6. Total Annual Project Benefit -- Add the values of all annual benefit categories.

Response: $664,010

7. Total Annual Project Cost – It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related. Completing Section IV-A, Project Budget of the evaluation document will provide all the necessary information for this item.

Response: $119,250

8. Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

Response: 5.57

9. ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Response: 2.99

10. Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response: N/A

11. ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
A. Total Annual Pre-Project Cost:	$
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
B. Total Annual Post-Project Cost:	$
State Government Benefit (= A-B):	$
Annual Benefit Summary	
State Government Benefit:	$
Citizen Benefit:	$
Opportunity Value or Risk/Loss Avoidance Benefit:	$664,010
C. Total Annual Project Benefit:	$664,010
D. Annual Prorated Cost (SECTION IV-A):	$119,250
Benefit / Cost Ratio: (C / D) =	5.57
Return On Investment (ROI): (C – D / Requested Project Funds) x 100 =	299%
☐ **Benefits Not Readily Quantifiable**	

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document		Points
1.	Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2.	Will the project improve customer service? **Location: Section I-B.2**	**15**
3.	Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4.	Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5.	Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6.	Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7.	Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8.	Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9.	Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10.	What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
	Total	**100**

Attachment A

Project Schedule

Description of Relevant Past Activities:

6/94	Formation of postsecondary institution alliance
5/95	Formation of the Statewide EDI Advisory Committee
8/95	Development of district to Iowa Department of Education data elements
9/95	Development of district to postsecondary data elements
11/95	Development of budget and timeline for implementation of EDI
1/96	Completion of EDI Implementation and Procedures Guidelines
8/96	Pilot EDI project with 6 school districts
11/96	Expansion of project to 20 school districts
1/97	First successful EDI transmission of data to the Iowa Department of Education from a local school district to fulfill student-based reporting requirements
6/97	First successful EDI test transmission of district to postsecondary
8/97	Expansion of project to 40 school districts
4/98	State legislative appropriation for EDI
8/98	Development of formal documentation of procedures for EDI
1/99	Development of nonpublic school project participation policy
3/99	Expansion of project to 150 school districts
11/99	Alliance with Regents Committee on Education Relations established
7/00	Production transcript partnership established with UNI
7/00	Expansion of project to 217 school districts
5/01	Begin designing and building system to transition Project EASIER from client-side to server-side processing of student records
6/01	Expansion of project to 225 school districts (some districts placed on waiting list due to Department resource availability)

Project EASIER Expansion Activities

Timeline: July, 2002 – July, 2003

Task 1:
Recruit and enable all public school districts by the end of the 2002-03 school year to begin district-to-state reporting and district-to-postsecondary transcript exchange.

Responsible Parties:

Coleen McClanahan
David J. Alvord
Roger Petersen
Alison Radl

Deliverables:

Provide all recruited and enabled districts with the software, training and technical assistance necessary to begin transferring electronic student data. All districts will have the necessary data elements defined and populated in their local student information systems.

Checkpoints**:**

As each district begins participating in Project EASIER, test transmissions to both the state and postsecondary institutions will be conducted and verified for accuracy.

Task 2:
Expand the number of required annual state and federal reports that can be completed through Project EASIER.

Responsible Parties:

Roger Petersen
David J. Alvord
Joe DeHart
Alison Radl
Coleen McClanahan

Deliverables**:**

Identify those data elements already in place on district's student information system which are required for completing annual state and federal reports. Modify district-to-state EDI maps to include the new information.

Checkpoints:

On-going testing and verification

Task 3:
Expand the project data element base by identifying and including those existing data elements needed for immediate and appropriate placement of students when they move from one Iowa school district to another to begin the district-to-district information exchange phase of Project EASIER

Responsible Parties:

Coleen McClanahan
Roger Petersen
Alison Radl

Deliverables**:**

Reach consensus with school districts regarding the data elements necessary for district-to-district transfer. Work with and advise JMC Corporation to assist them in creating extracts and transcripts including identified variables. Create and/or modify existing EDI maps to accommodate district-to-district student information transfer.

Note: JMC software deserves special consideration due its prevalence with school districts in Iowa accounting for 60% of all student information systems used in Project EASIER. JMC Software also creates an EDI file as part of the extract. New reporting requirements must be addressed from within the software itself.

Checkpoints**:**

Reach consensus regarding necessary data elements. Get delivery date from JMC Corporation regarding software version including district-to-district data elements. Completion of necessary district-to-district EDI maps

Task 4:
Increase the number of school district and postsecondary institution trading partnerships.

Responsible Parties:

Coleen McClanahan
David J. Alvord
Roger Petersen
Alison Radl

Deliverables**:**

Recruit and enable additional districts into Project EASIER. Provide technical assistance to additional postsecondary institutions to enable them to receive electronic transcripts.

Checkpoints**:**

On-going testing and verification.

Task 5:

Increase the number of Iowa community colleges capable of receiving electronic transcripts from Iowa secondary schools.

Responsible Parties:

Coleen McClanahan
David J. Alvord
Roger Petersen
Alison Radl

Deliverables**:**

Recruit and provide technical assistance to all Iowa community colleges to allow them to begin receiving electronic transcripts from Iowa secondary schools participating in Project EASIER.

Checkpoints**:**

On-going testing and verification as community colleges begin receiving electronic transcripts.

Task 6:

Purchase and configure a test server to assist in testing the new components necessary to facilitate the Project EASIER expansion.

Responsible Parties:

Roger Petersen
Alison Radl
David J. Alvord
Joe DeHart

Deliverables**:**

Test system will run exact duplicate of the production environment. New components needed to handle expansion will be in place and tested both in test and production modes.

Checkpoints**:**

On-going testing and verification of necessary software components.

Attachment B

Note: The information presented below was presented in the original Department of Education's pooled technology fund request. The additional benefits associated with the proposed expansion of Project EASIER still fall within this reange, but may push the actual savings towards the higher end of the range.

Introduction to ROI

The basic components of Project EASIER involve the transmission of individual student records to the Department to satisfy state reporting requirements in lieu of completing web-based forms, sending electronic transcripts to post-secondary institutions in lieu of preparing paper transcripts, and eventually sending individual student records to other school districts via EDI when students transfer from one Iowa school district to another in lieu of mailing photo copies of records.

To accomplish this, individual student records are extracted from a district's student information system, mapped to EDI standards, encrypted, and sent as an email attachment to the appropriate trading partner.

Cost savings using Project EASIER procedures have been estimated only for school districts for the submission of state required reports and for transmitting electronic transcripts to post-secondary institutions. No cost savings have been estimated for district to district exchange of student records since this phase of the project is still in the very early stages of development.

Benefits accrued to the students, citizens, and to the Department come in the form of more accurate, timely, and secure information. Benefits to the post-secondary institutions include less time spent on individual transcript evaluation, due to the standardization of curriculum course codes across the state, as well as more security for student records containing confidential student information needed by post-secondary institutions in determining admission. One study conducted a number of years ago on the west-coast revealed that as many as 15 separate people were involved in handling student transcripts send in the traditional manner.

The methodology used to estimate savings due to implementation of Project EASIER procedures is based on the amount of time spent by school districts in completing state required reports via the web and in preparing transcripts for post-secondary institutions in the traditional manner.

Completing Required State Reports

Completing State Reports Without Project EASIER

The time necessary to complete state reports using the web varies according to the enrollment of the school district. In estimating time and cost, the districts were divided into three enrollment groupings: 1) less than 400 enrollment, 2) 400-2,499 enrollment, and 3) 2,500 and above enrollment. Larger districts require more time in completing state reports due to the volume of students, staff and the number of buildings. In addition, consideration was given to the type of district staff completing the forms. Three basic groups of school district staff complete state reports on the web: 1) superintendents, 2) principals, and 3) student support staff (e.g. counselors, curriculum coordinators, administrative assistants, etc.). The amount of time spent by each of these staff groups for the completion of state reports varies according to the size of the district. For example, Superintendents of large school districts (>2500 students) spend less time completing state reports due to the availability of other staff members to be assigned to this task. Superintendents of small school districts spend a considerable amount of time completing state reports.

Estimated time and cost for completing state reports are based on using both conservative and Moderate figures and are reported as a range.

Completing Required State Reports with Project EASIER

A conservative estimated range of savings was determined using both testimonial evidence from Project EASIER participants and estimates determined by Department of Education staff assisting districts in Project EASIER. To the best of our knowledge, Project EASIER districts reduce the amount of time completing required state reports from 40 to 60 percent.

Estimated Annual Savings for the Current 216 Participating Project EASIER Districts Completing State Reports

	Conservative Estimate	Moderate Estimate
With Savings of 40%	$88,600	$177,198
With Savings of 60%	$132,899	$265,797

Estimated Annual Savings for the 158 Districts Currently Not Participating in Project EASIER Completing State Reports

	Conservative Estimate	Moderate Estimate
With Savings of 40%	$63,845	$127,689
With Savings of 60%	$95,767	$191,533

Expected Annual Savings for Completing State Reports When All Districts are in Project EASIER- 2002-2003 School Year

	Conservative Estimate	Moderate Estimate
With Savings of 40%	$152,444	$304,887
With Savings of 60%	$228,667	$457,330

Preparing Student Transcripts

Transcript Preparation without Project EASIER

The preparation of student transcripts by Iowa school districts to be sent to Iowa post-secondary institutions varies by both the size of the school district and by the level of technology expertise. For the purpose of estimating savings for districts using the Project EASIER technology only district enrollment was considered since no definitive measure of technology expertise is available. In general, costs appear

to be related to district size, with higher costs per transcript associated with smaller districts and lower costs per transcript associated with larger districts. The majority of school districts pay clerical personnel to retrieve and copy historical records on the courses students have taken, the grades students receive for these courses, the student's class rank, etc. These documents are then photocopied, reviewed by the high school principal or counselor and then mailed. In districts with higher levels of technology expertise, the records that compose the transcripts are retrieved electronically from databases and are then packaged and mailed. Based on information obtained by the Department, the range in cost for preparing an initial student transcript for post-secondary institutions varied from about $2.25 to about $40.

Transcript Preparation with Project EASIER

For districts participating in Project Easier, once the data elements are populated in the student information system, the current year information as well as historical information can be extracted as an ASCII file from the student information system. This data is then mapped to EDI standards, encrypted, and sent as an email attachment to the AACRAO (American Association of Collegiate Registrars and Admissions Officials) Server where Iowa post-secondary institutions are notified that a transcript is awaiting retrieval. In most cases this take only a matter of minutes for school district personnel to complete.

Total Transcript Savings to Iowa School Districts per Year

	With Savings of 40%	With Savings of 60%
Districts in Project EASIER	$85,530	$128,295
Districts Not in Project EASIER	$52,256	$78,385
Total	$137,786	$206,680

Total Savings Summary

Conservative Estimate of Annual Savings by the End of the 2002-03 School Year

	With Savings of 40%	With Savings of 60%
State Reporting	$152,444	$228,667
Transcripts	$137,786	$206,680
Total	$290,230	$435,347

Moderate Estimate of Annual Savings by the End of the 2002-03 School Year

	With Savings of 40%	With Savings of 60%
State Reporting	$228,667	$457,330
Transcripts	$137,786	$206,680
Total	$366,453	$664,010